
A new initiative aimed at helping people re-learn language after suffering a stroke has shown the success of the learning may depend largely on which language the stroke sufferer is trying to learn. Julian Siddle of our science staff reports:

Stroke sufferers often lose the ability to speak or remember events, but how difficult or easy it is to re-learn language can depend on which part of the brain was affected by the stroke and which language is being learnt.

Professor Anthony Kong from the University of Central Florida noticed this when working in Singapore. He found a big difference in stroke patients' **symptoms** depending on whether they spoke English or Chinese:

Professor Kong: 'In Chinese there is a **higher portion of** right **hemisphere** activation, in terms of processing the language, and this **contrasts with** English or other Latin based languages in which most of the activations are on the left side of the brain.'

He says **brain imaging** techniques show **tonal languages**, such as Chinese, make more use of the right side of the brain, whereas the processing for Latin based languages, such as English, **tends to occur** in the left side. This means for Chinese speakers, most of the medical research on re-learning language after a stroke may not be relevant to them, as it comes from **investigations** with English speakers.

Professor Kong is now about to start the first Chinese specific research project on the way brain damage affects speech. He hopes this will lead to better after stroke therapy for speakers of Chinese and other **tonal languages**.

Julian Siddle, BBC

Vocabulary and definitions

stroke sufferers	people who have had a stroke , i.e. a sudden change in the blood supply to a part of the brain, and are often partially disabled (usually on one side of their body) as a result
symptoms	a symptom is one of the ways in which a disease, illness or medical condition manifests, or shows itself
a higher portion of	more
hemisphere	here, half of the front part of the brain; the left and right hemispheres of your brain process information in different ways: the left hemisphere works in a more logical, linear, reality-based way, whereas the right hemisphere is more random, intuitive and fantasy oriented
contrasts with	is opposite to, is unlike
brain imaging	studying the brain using scans, tomography, magnetic resonance imaging, encephalography or other techniques
tonal languages	languages where using specific tones, i.e. the quality of the speaker's voice (e.g. pitch, rising or falling intonations etc.), is very important both for expressing yourself while speaking and for understanding the speech
tends to occur	usually happens
investigations	research, examining and/or testing

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<http://news.bbc.co.uk/1/hi/health/6407161.stm>

Read and listen to the story and the vocabulary online:

http://www.bbc.co.uk/worldservice/learningenglish/language/wordsinthenews/2009/10/091020_witn_stroke_language.shtml